## ABSTRACT OF THE DISCLOSURE

A process for the polymerisation of olefin monomers selected from (a) ethylene, (b) propylene (c) mixtures of ethylene and propylene and (d) mixtures of (a), (b) or (c) with one or more other alpha-olefins is performed in a polymerisation reactor in the presence of a supported polymerisation catalyst *characterised* in that prior to injection into the reactor said supported polymerisation catalyst in the form of a powder is contacted with an inert hydrocarbon liquid in a quantity sufficient to maintain said catalyst in powder form. The preferred inert hydrocarbon liquid is hexane. The supported polymerisation catalyst is preferably a supported metallocene catalyst. According to the process of the prescrit invention the level of fines associated with the polymer products is reduced in particular the level of fines having a diameter < 125  $\mu$ m and microfines of diameter < 50  $\mu$ m.